

## CLAIMS:

1. Method of enabling starting of sessions from a first computational device (14) communicating via a first network (12) having a first addressing realm to a second computational device (18) on a second network (16) having a second addressing realm, comprising the steps of:
  - 5 - receiving at least one query (20) concerning the second device including at least a device name (server) and a service name (http) associated with the second device, which query has a first destination address (AG1) of the first addressing realm associated with the second network, (step 68),
  - looking up a second address (AY) as well as a service port number (PYHTTP) associated with a service of the second device in the second addressing realm based on the device name and service name, (step 70),
  - binding the first address (AG1) and a session port number (PGHTTP) of the first addressing realm to the second address (AY) and the service port number (PYHTTP) of the second device (18) in the second addressing realm, (step 76), and
  - 15 - answering the query (20) of the first device (14) with at least one message (22) leaving the second network comprising the first address and the session port number of the first addressing realm, such that a session can be started from the first device to the second device where the first address and session port number of the first addressing realm and the second address and the service port number of the second addressing realm are exchanged
  - 20 with each other in the headers of packets of the session when passing between the two networks.
2. Method according to claim 1, wherein the step of receiving comprises receiving two queries, one including the device name and one including the service name and the step of answering the query comprises answering with two messages, one including the first address and the other including the session port number.
- 25 3. Method according to claim 1, wherein the step of answering the query comprises the steps of generating said message (42; 82) including the second address (AY)

and service port number (PYHTTP) of the second addressing realm as a response to the query, (step 72), replacing the second address and service port number of the second addressing realm in the response message for the first address (AG1) and session port number of the first addressing realm, (step 74), and sending the message (22) with the replaced  
5 information to the first device from the second addressing realm, (step 78).

4. Method according to claim 1, wherein the query further comprises a specified service resolving port number (PDNS).

10 5. Method according to claim 4, further comprising the step of translating the first address and the service resolving port number to a third address (AS) and service resolving port number (PDNS) of the second addressing realm associated with a name and service resolving server (80) of the second addressing realm, forwarding the query (82) with translated address and port number to the name and service resolving server, generating the  
15 response (84) to the query in the name and service resolving server as a message with the third address and service resolving port number as source address, and translating the third address and service resolving port number of the second addressing realm to the first address and service resolving port number of the first addressing realm before the response leaves the second network.

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6. Method according to claim 1, further including the step of receiving a first data packet of the session from the first device at the interface having the first address and session port number of the first addressing realm as destination address, translating the first address and session port number of the first addressing realm to the second address and  
25 service port number of the second addressing realm and forwarding the packet to the second device in the second addressing realm using this latter address and service port number.

7. Method according to claim 1, wherein the session port number of the first addressing realm is different than the service port number of the second addressing realm.

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8. Interface device (10) for connection between a first network (12) having a first addressing realm and a second network (16) having a second addressing realm enabling starting of sessions from a first computational device (14) communicating with the interface

device via the first network to a second computational device (18) in the second network, comprising:

- a first input (24) to be connected to the first network for receiving at least one query (20) concerning the second device, which query includes at least a device name (server) and a service name (http) associated with the second device and has a first destination address (AG1) of the first addressing realm associated with the second network,
- a first output (22) for connection to the first network,
- a name and service resolving unit (40) arranged to look up a second address (AY) as well as a service port number (PHTTP) associated with a service of the second device in the second addressing realm based on the device name and the service name,
- an address and port translation table (38), and
- a control unit (32) arranged to:
  - bind the received first address (AG1) and a session port number of the first addressing realm (PGHTTP) to the second address (AY) and service port number (PYHTTP) belonging the second device in the second addressing realm in the address and port translation table, and
  - provide a message (22) leaving the second network as at least one answer to the query comprising the first address and the session port number of the first addressing realm to the first device, such that a session can be started from the first device to the second device where the first address and session port number of the first addressing realm and the second address and service port number of the second addressing realm are exchanged with each other in the headers of packets of the session when passing between the two networks.

9. System of computational devices for connection to a first network (12) having a first addressing realm, via which first network a first computational device (14) can communicate with the system and comprising a second network (16) having a second addressing realm, said second network comprising:

- a second computational device (18), and
  - an interface device (10) provided between the first and second networks
- comprising:
- a first input (24) to be connected to the first network for receiving a query (20) concerning the second device, which query includes at least a device name (server) and a service name (http) associated with the second device and has a first destination address (AG1) of the first addressing realm associated with the second network,

- a first output (26) for connection to the first network,
  - an address and port translation table (38), and
  - a control unit (32) arranged to:
    - bind the first address (AG1) and a session port number (PGHTTP)
- 5 of the first addressing realm to a second address (PY) and a service port number (PYHTTP) belonging to the second device in the second addressing realm in the address and port translation table, and
- provide a message (22) leaving the second network as an answer to the query of the first device comprising the first address and the session port number of the
- 10 first addressing realm,
- wherein the second network further comprises a name and service resolving unit (40; 80) arranged to look up the second address (AY) as well as the service port number (PYHTTP) associated with a service of the second device in the second addressing realm based on the device name and the service name, such that a session can be started from the
- 15 first device to the second device where the first address and session port number of the first addressing realm and the second address and the service port number of the second addressing realm are exchanged for each other in the headers of packets of the session when passing between the two networks.
- 20 10. System of devices according to claim 9, wherein the first input is arranged to receive two queries, one including the device name and one including the service name and the control unit is arranged to answer the query with two messages, one including the first address and the other including the session port number.
- 25 11. System of devices according to claim 9, wherein the name and service resolving unit when answering the query is arranged to generate said message (42; 84) including the second address and service port number of the second addressing realm as a response to the query and the control unit of the interface device is arranged to replace the second address and service port number of the second addressing realm in the response
- 30 message with the first address and session port number of the first addressing realm and send the message with the replaced information to the first device from the second addressing realm.

12. System of computational devices according to claim 9, wherein the name and service resolving unit (40) is provided in the interface device.

13. System of devices according to claim 9, wherein the name and service  
5 resolving unit (80) is provided in a name and service resolving server in the second network.

14. System of devices according to claim 13, wherein the query further comprises a service resolving port number (PDNS) and the control unit (32) is further arranged to translate the first address and the service resolving port number to a third address (AS) and  
10 service resolving port number (PDNS) of the second addressing realm associated with the name and service resolving server of the second addressing realm, forward the query with translated address and service resolving port number (82) to the name and service resolving server, the name and service resolving server is further arranged to generate the response (84) to the query as a message with the third address and service resolving port number as source  
15 address, and the control unit is finally arranged to translate the third address and service resolving port number of the second addressing realm to the first address and service resolving port number of the first addressing realm before the response leaves the second network.

20 15. System of devices according to claim 9, wherein the first input of the interface device is further arranged to receive a first data packet of the session from the first device having the first address (AG1) and session port number (PGHTTP) of the first addressing realm as destination address, wherein the address and port translating table (38) is arranged to translate the first address and session port number of the first addressing realm to the second  
25 address and service port number of the second addressing realm and the control unit is arranged to forward the packet to the second device in the second addressing realm using this latter address and service port number.

16. System of devices according to claim 9, wherein the session port number  
30 (PGHTTP) of the first addressing realm is different than the service port number (PYHTTP) of the second addressing realm.

17. Computer program product (86) to be used on an interface device (10) between a first network (12) having a first addressing realm and a second network (16)

having a second addressing realm, wherein a first computational device (14) can communicate with the interface device via the first network and the second network comprises a second computational device (18), said computer program product having:

- computer program code, to make the interface device execute, when said  
5 program code is loaded in the interface device:
  - upon reception of at least one query (20) from the first computational device concerning the second computational device, which query includes a device name (server) and a service name (http) associated with the second device and has a first destination address (AG1) of the first addressing realm associated with the second network,  
10 - looking up a second address (AY) as well as a service port number (PYHTTP) associated with a service of the second device in the second addressing realm based on at least the device name and service name,
    - binding the first address (AG1) and a session port number (PGHTTP) of the first addressing realm to the second address (AY) and service port number (PYHTTP) of the  
15 second device in the second addressing realm, and
      - answering the query with at least one message (22) leaving the second  
network comprising the first address and the session port number of the first addressing realm to the first device, such that a session can be started from the first device to the second  
device, where the first address and session port number of the first addressing realm and the  
20 second address and the service port number of the second addressing realm are exchanged with each other in the headers of packets of the session when passing between the two networks.